

Listing of Claims:

1 - 17 Cancelled)

18. (Currently Amended) A method for preparing ~~the non-ionic~~ a rubber modified styrenic resin composition ~~of claim 1 with~~ at least improved toughness properties, consisting of from about 92.0% to about 99.9% by weight of a rubber modified styrene maleic anhydride copolymer, from about 0.1% to about 8.0 % by weight of polybutene based on the weight of the rubber modified styrenic resin composition, and optionally, customary additives including stabilizers, antioxidants, lubricants, fillers, pigments, and/or plasticizers; and wherein said rubber modified styrenic resin composition is produced in a polymerization process and said polybutene is part of the reactive mixture of said styrene, said maleic anhydride and said rubber in said polymerization process, the steps comprising:

in said polymerization process, adding the polybutene to partially polymerized syrup comprised of rubber, styrene, and maleic anhydride after the syrup exits a reactor and enters a devolatilizer.

19. (Currently Amended) A method for preparing ~~the non-ionic~~ a rubber modified styrenic resin composition ~~of claim 1 with~~ at least improved toughness properties, consisting of from about 92.0% to about 99.9% by weight of a rubber modified styrene maleic anhydride copolymer, from about 0.1% to about 8.0 % by weight of polybutene based on the weight of the rubber modified styrenic resin composition, and optionally, customary additives including stabilizers, antioxidants,

lubricants, fillers, pigments, and/or plasticizers; and
wherein said rubber modified styrenic resin composition is
produced in a polymerization process and said polybutene is
part of the reactive mixture of said styrene, said maleic
anhydride and said rubber in said polymerization process, the
steps comprising:

for the polymerization process, forming a solution of the polybutene, maleic anhydride, and rubber by dissolving the polybutene, the maleic anhydride and the rubber in styrene monomer,

continuously feeding the solution with said styrene monomer into a polymerization reactor vessel, and

devolatilizing the stream exiting the polymerization reactor vessel thereby producing the ~~non-ionic~~ rubber modified styrenic resin composition.

20. (Currently Amended) A method for preparing ~~the non-ionic~~ a rubber modified styrenic resin composition ~~of claim 1 with~~ at least improved toughness properties, consisting of from about 92.0% to about 99.9% by weight of a rubber modified styrene maleic anhydride copolymer, from about 0.1% to about 8.0 % by weight of polybutene based on the weight of the rubber modified styrenic resin composition, and optionally, customary additives including stabilizers, antioxidants, lubricants, fillers, pigments, and/or plasticizers; and wherein said rubber modified styrenic resin composition is produced in a polymerization process and said polybutene is part of the reactive mixture of said styrene, said maleic anhydride and said rubber in said polymerization process, the steps comprising:

for the polymerization process, adding polybutene and styrene maleic anhydride rubber feed separately into a polymerization reactor vessel,

polymerizing the styrene maleic anhydride feed in the presence of the polybutene and the rubber in the polymerization reactor vessel, and

devolatilizing the stream exiting the polymerization reactor vessel thereby producing said ~~non-ionic~~ rubber modified styrenic resin composition.

21. (Currently Amended) A method for preparing ~~the non-ionic~~ a rubber modified styrenic resin composition ~~of claim 1 with~~ at least improved toughness properties, consisting of from about 92.0% to about 99.9% by weight of a rubber modified styrene maleic anhydride copolymer, from about 0.1% to about 8.0 % by weight of polybutene based on the weight of the rubber modified styrenic resin composition, and optionally, customary additives including stabilizers, antioxidants, lubricants, fillers, pigments, and/or plasticizers; and wherein said rubber modified styrenic resin composition is produced in a polymerization process and said polybutene is part of the reactive mixture of said styrene, said maleic anhydride and said rubber in said polymerization process, the steps comprising:

for the polymerization process, forming a solution of maleic anhydride and rubber in styrene monomer,

continuously feeding said solution with said styrene monomer into a polymerization reactor vessel to produce a partially polymerized styrenic syrup,

adding the polybutene to said partially polymerized styrenic syrup after it exits the reactor vessel and devolatilizing the stream after the polybutene has been

added to the partially polymerized styrenic syrup thereby producing the ~~non-ionic~~ rubber modified styrenic resin composition.

22 - 24 (Cancelled)

25. (New) The method for preparing a rubber modified styrenic resin composition of claim 18 wherein the amount of said polybutene ranges from about 2 to about 6 weight percent based on the weight of the rubber modified styrenic resin composition.

26. (New) The method for preparing a rubber modified styrenic resin composition of claim 18 wherein said polybutene has a number average molecular weight ranging from about 900 to about 2500.

27. (New) The method for preparing a rubber modified styrenic resin composition of claim 18 wherein said rubber modified styrene maleic anhydride copolymer is comprised of from about 2% to about 25% by weight of maleic anhydride and from about 4% to about 20% by weight of rubber based on the weight of said rubber modified styrene maleic anhydride copolymer, and wherein the particle size of the rubber ranges from about 0.1 micron to about 11 microns.

28. (New) The method for preparing a rubber modified styrenic resin composition of claim 27 wherein said rubber is polybutadiene.

29. (New) The method for preparing a rubber modified styrenic resin composition of claim 19 wherein the amount of said

polybutene ranges from about 2 to about 6 weight percent based on the weight of the rubber modified styrenic resin composition.

30. (New) The method for preparing a rubber modified styrenic resin composition of claim 19 wherein said polybutene has a number average molecular weight ranging from about 900 to about 2500.

31. (New) The method for preparing a rubber modified styrenic resin composition of claim 19 wherein said rubber modified styrene maleic anhydride copolymer is comprised of from about 2% to about 25% by weight of maleic anhydride and from about 4% to about 20% by weight of rubber based on the weight of said rubber modified styrene maleic anhydride copolymer, and wherein the particle size of the rubber ranges from about 0.1 micron to about 11 microns.

32. (New) The method for preparing a rubber modified styrenic resin composition of claim 31 wherein said rubber is polybutadiene.

33. (New) The method for preparing a rubber modified styrenic resin composition of claim 20 wherein the amount of said polybutene ranges from about 2 to about 6 weight percent based on the weight of the rubber modified styrenic resin composition.

34. (New) The method for preparing a rubber modified styrenic resin composition of claim 20 wherein said polybutene has a number average molecular weight ranging from about 900 to about 2500.

35. (New) The method for preparing a rubber modified styrenic resin composition of claim 20 wherein said rubber modified styrene maleic anhydride copolymer is comprised of from about 2% to about 25% by weight of maleic anhydride and from about 4% to about 20% by weight of rubber based on the weight of said rubber modified styrene maleic anhydride copolymer, and wherein the particle size of the rubber ranges from about 0.1 micron to about 11 microns.

36. (New) The method for preparing a rubber modified styrenic resin composition of claim 35 wherein said rubber is polybutadiene.

37. (New) The method for preparing a rubber modified styrenic resin composition of claim 21 wherein the amount of said polybutene ranges from about 2 to about 6 weight percent based on the weight of the rubber modified styrenic resin composition.

38. (New) The method for preparing a rubber modified styrenic resin composition of claim 21 wherein said polybutene has a number average molecular weight ranging from about 900 to about 2500.

39. (New) The method for preparing a rubber modified styrenic resin composition of claim 21 wherein said rubber modified styrene maleic anhydride copolymer is comprised of from about 2% to about 25% by weight of maleic anhydride and from about 4% to about 20% by weight of rubber based on the weight of said rubber modified styrene maleic anhydride copolymer, and

wherein the particle size of the rubber ranges from about 0.1 micron to about 11 microns.

40. (New) The method for preparing a rubber modified styrenic resin composition of claim 39 wherein said rubber is polybutadiene.